Engineer: Chris Samios	Date: 3/11/04	Raytheon JPS Communications 5800 Departure Drive, Raleigh, NC 27616			
Drawn: Bruce Page	Date: 3/11/04				
Approved: Chris Samios	Date: 3/11/04	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 3/11/04	Size: A	Dwg. #: **5961-271134-APP**	Rev: **A**	Sheet: 1 Of 1

APPLIES TO:

Motorola Astro Saber Portable
Motorola Analog Saber Portable

RADIO MODIFICATIONS: None required

RADIO PROGRAMMING: None required

RADIO CONTROLS:

1. Adjust the Volume Control until the yellow "SIGNAL" indicator on the associated DSP Module flashes with receive audio. Should be about in the mid-range (12 o'clock) position.

CABLING:

Standard ACU-1000 and ACU-T Interface cables are made up of a 2 foot TRP Radio Tray Interface cable and the appropriate 13-foot Extension cable.

ACU-1000 Interface Cable	JPS P/N 5961-291134	(5961-271134 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281134	(5961-271134 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271134	
RF Connector Type		

DSP PROGRAMMING:

RX Level	4	-4dBm
TX Level	7	4dBm
Squelch Type	VOX*	
COR Polarity	Active Low*	
High Frequency Equalizer	6	3.5dB boost
RX Audio Delay	2*	100 ms*
TX Audio Delay (Radio Type)	0*	No Delay*
Noise Reduction Value	0*	Off*
VOX/VMR Threshold	1*	Med1*
VOX/VMR Hang Time	3*	775 ms*
COR Inhibit After PTT	1*	100 ms*
All Others	As needed	

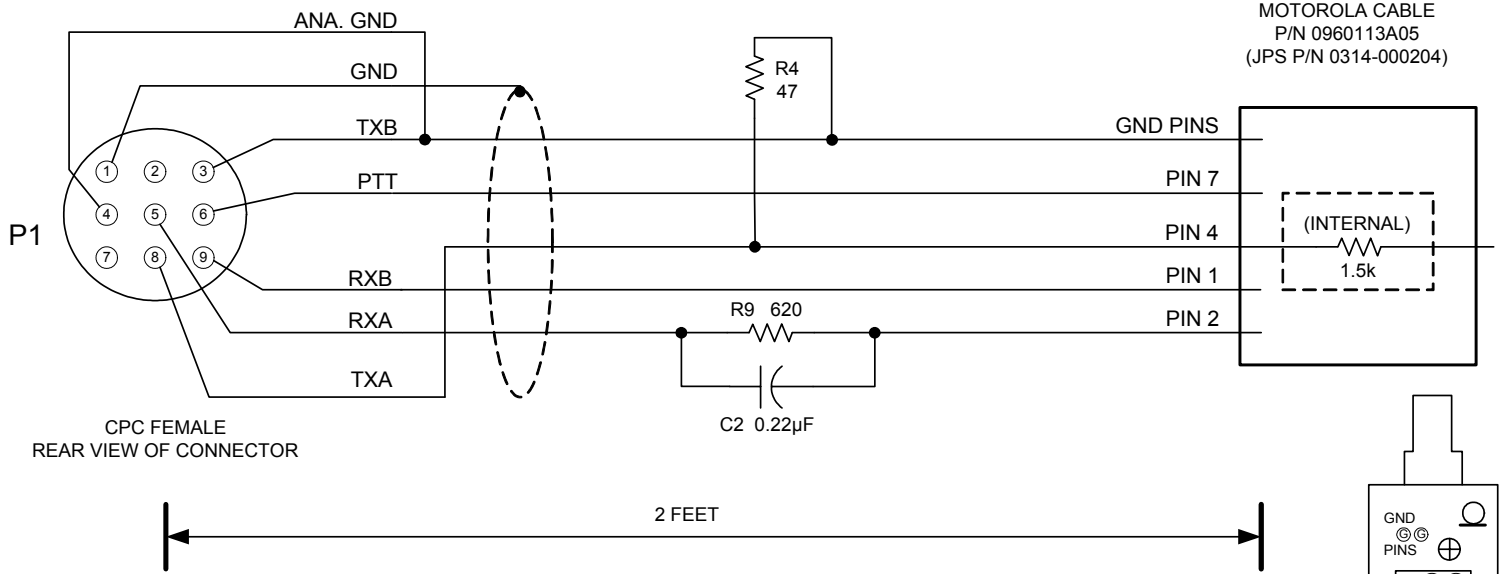
(* Indicates Default Value)

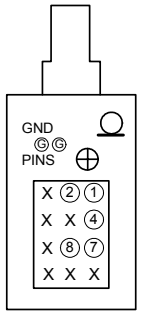
NOTES:

Rev	ECO	Date
A		

PURCHASED PART

USE MOLDED CABLE
(JPS P/N 5961-261003-00)





VIEWING CABLE FROM
CONNECTOR SIDE
(X = NO PIN)

COMPONENT PCB (JPS P/N 5961-271000)	
C2	JPS P/N 0327-226500
R4	JPS P/N 1820-470000
R9	JPS P/N 1820-621000
JU1	
JU2	
JU5	

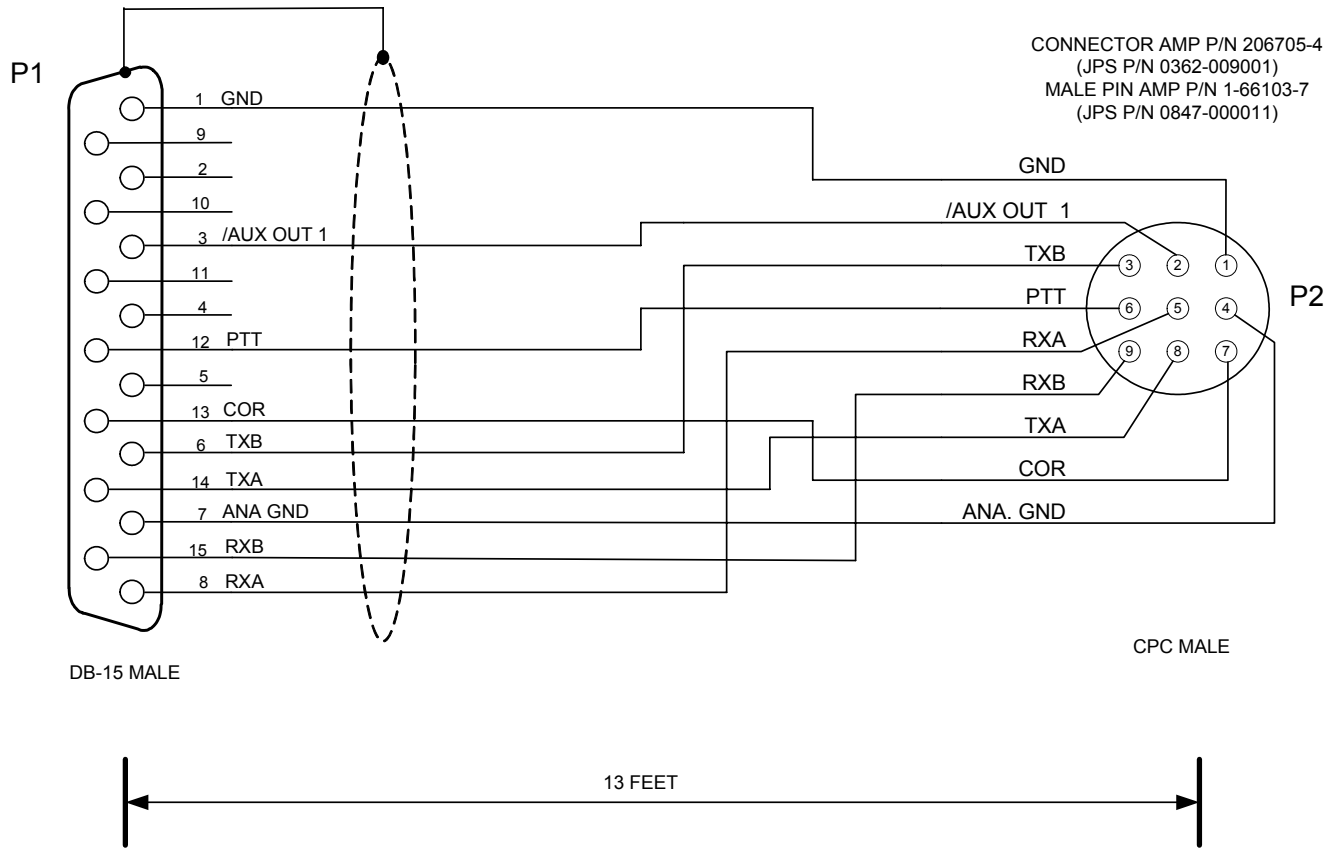
NOTE: SHIELD DRAIN CONNECTED TO PIN 1 OF P1 ONLY.

USED WITH:
MOTOROLA ASTRO SABER PORTABLE
MOTOROLA ANALOG SABER PORTABLE

Designed By: CTS	Raytheon JPS Communications Raleigh, NC USA		
Drawn By: EDV	Title: CABLE, CPC TO MOTOROLA ASTRO SABER		
Checked By: JAC	Size A	Document Number **5961-271134**	Rev A
	Issued Date: NOVEMBER 17, 2003		Sheet 1 of 1

PURCHASED PART

Rev	ECO	Date
A		



NOTES:
1) USE BELDEN 9934 SHIELDED CABLE.
2) CONNECT SHIELD DRAIN TO SHELL OF P1 ONLY.
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

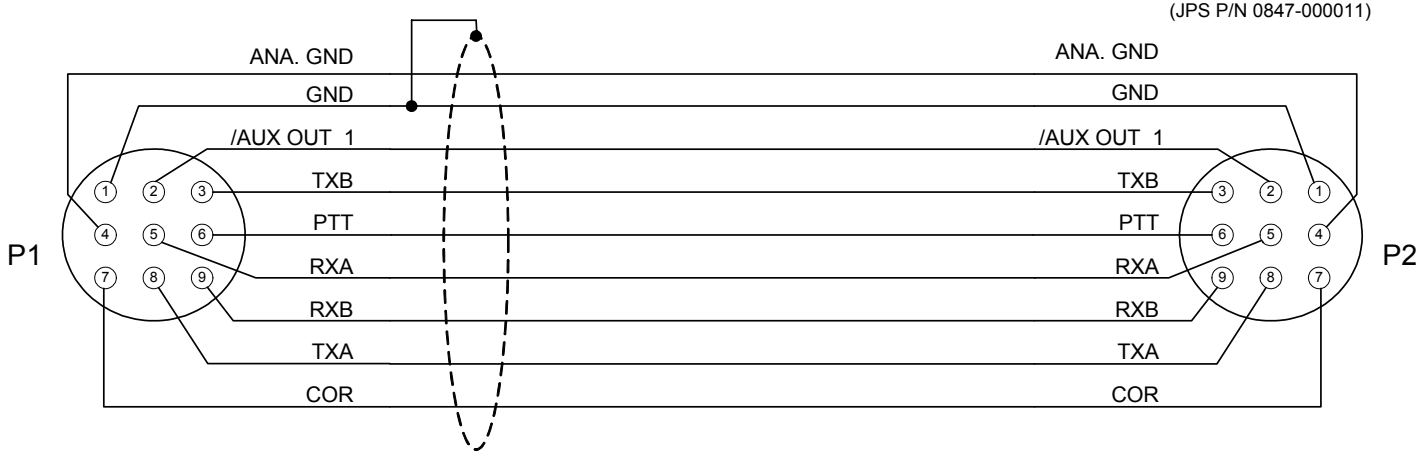
Designed By: JAC	Raytheon JPS Communications		
Drawn By: JAC	Title: CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size: A	Document Number: **5961-261002-00**	Rev: A
	Issued Date: JANUARY 5, 2004		Sheet 1 of 1

Rev	ECO	Date
A		

PURCHASED PART

CONNECTOR AMP P/N 206708-1
(JPS P/N 0362-005003)
FEMALE PIN AMP P/N 1-66105-8
(JPS P/N 0362-005002)

CONNECTOR AMP P/N 206705-4
(JPS P/N 0362-009001)
MALE PIN AMP P/N 1-66103-7
(JPS P/N 0847-000011)



NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.
2) CONNECT SHIELD DRAIN TO PIN 1 OF P1 ONLY.
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

Designed By: JAC	Raytheon JPS Communications Raleigh, NC USA		
Drawn By: JAC	Title: CABLE, ACU-T RADIO EXTENSION - 13 FT		
Checked By: RBP	Size: A	Document Number: **5961-281013-00**	Rev: A
	Issued Date: JANUARY 5, 2004		Sheet 1 of 1